

## Case 2918

### ***Aspidiphorus* Ziegler in Dejean, 1821 (Insecta, Coleoptera): proposed conservation as the correct original spelling, and ASPIDIPHORIDAE Kiesenwetter, 1877 (1859): proposed placement on the Official List**

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**Abstract.** The purpose of this application is to conserve the universally accepted spelling *Aspidiphorus* Ziegler in Dejean, 1821 for a genus of 12 nominal species of small beetles which feed on slime moulds and have a broad distribution in the Old World. It is also proposed that the name ASPIDIPHORIDAE Kiesenwetter, 1877 (1859) should be placed on the Official List as the valid name for the family group that includes both *Aspidiphorus* and *Sphindus* Megerle in Dejean, 1821.

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1. In the 1821 edition of his catalog, Dejean included two new genera with authorship attributed as follows: *Arpidiphorus* Ziegler (p. 47) and *Sphindus* Megerle (p. 102). He placed the single nominal species *Nitidula orbiculata* Gyllenhal, 1808 (p. 242) in *Arpidiphorus*, and included *N. dubia* Gyllenhal, 1808 (p. 243) as the only species in *Sphindus*. Dejean cited '*Sphindus* *gyllenhali* Dej.' in conjunction with *dubia*. It is not clear whether *gyllenhali* was a manuscript name of Dejean's or an unnecessary replacement name for *dubia*; it has not been used again. *Nitidula orbiculata* and *N. dubia* are the type species by monotypy of *Arpidiphorus* and *Sphindus* respectively. The two new genera were unaccompanied by any description, diagnosis or illustration, but the requirements of availability under Article 12b(5) of the Code are met because the included nominal species can be identified by the citation of their authors.

2. Sturm (1826, pp. 16, 98) used the spelling *Aspidiphorus* for *Arpidiphorus*, attributing the genus to Ziegler and including *Nitidula orbiculata* Gyllenhal. Latreille (1829, p. 508) also used *Aspidiphorus*, attributed to Ziegler and Dejean. He included *N. orbiculata* and placed the genus in his suprageneric group 'Dermestes'.

3. The original name *Arpidiphorus* was apparently an error for *Aspidiphorus*, which has been used regularly in the literature after Latreille (1829) with either Dejean, Latreille or Ziegler cited as author. The changed spelling was used by Dejean himself in the subsequent edition (1837) of his catalog where it too was attributed to Ziegler, not Sturm or Latreille. Etymological considerations also suggest that a misspelling occurred in the original publication. There is no meaning for the stem 'arpid-' in the classical languages whereas 'aspid-' (= shield), when combined with 'phorus' (= bearer), is perfectly fitting given the form of these beetles. No internal evidence from Dejean's (1821) catalog has been found, however, to support the assumption that a lapsus calami or printer's error occurred. There have been four exceptions to the usage of *Aspidiphorus* in over 170 years: (1) the unjustified emendation *Aspidophorus* Agassiz, 1846 (p. 36); (2) the incorrect spelling

*Aspidiphorus* Arnold, 1938 (see Burakowski, Mroczkowski & Stefańska, 1986, p. 121); (3) the incorrect spelling *Aspidophorus* Kuhn, 1912 (see Burakowski et al., 1986, p. 121) and (4) Dejean's (1821) original spelling *Arpidiphorus* which was used by Merkl (1986, p. 177) and Silfverberg (1979, p. 43; 1992, p. 51). As incorrect subsequent spellings the names noted in (2) and (3) are unavailable. The name *Aspidophorus* Agassiz is a junior homonym of the fish name *Aspidophorus* Lacépède, [1801]. An application (Case 2897) for the conservation of the fish name *Agonus* Bloch & Schneider, 1801 by the suppression for priority but not homonymy of *Aspidophorus* Lacépède, [1801] by Dr B.A. Sheiko (Kamchatka Institute of Ecology, Russian Academy of Sciences, Petropavlovsk-Kamchatsky, Russia) is published in BZN 52: 57–60 (March 1995). Gistel (1848, p. viii) replaced *Aspidiphorus* Ziegler by *Box*, believing Ziegler's name to be a junior homonym of '*Aspidiphorus*' [sic] Lacépède. It is proposed that the names *Aspidophorus* Agassiz and *Box* Gistel be placed on the Official Index. A list of 90 references using the generally accepted spelling *Aspidiphorus* Ziegler in Dejean has been given to the Commission Secretariat in support of a request for conservation of the name. These references include the key works by Crowson (1955), Sen Gupta & Crowson (1979), Sen Gupta & Pal (1982), Burakowski & Ślipiński (1987) and McHugh (1993).

4. Thomson (1859, p. 90) proposed the genus *Coniporus*, into which he transferred the single species *Aspidiphorus orbiculatus* (Gyllenhal, 1808). *Coniporus* is thus a junior objective synonym of *Aspidiphorus*. Thomson placed *Coniporus* as the single genus in the new tribe 'Coniporina' (family CIOIDAE). *Sphindus* was transferred (p. 91) to the tribe 'Cioina' in the same family.

5. The 'Famille des Sphindides' was proposed (p. 224) to accommodate both *Sphindus* and *Aspidiphorus* in Jacquelin du Val's ('1859–63') treatment. The text and catalog sections of this work have been dated as 1860 by Silfverberg (1992, p. 51) and as 1861 by Burakowski, Mroczkowski & Stefańska (1986, p. 121). For this application I have adopted the later date but the nomenclatural outcome would be the same assuming either date.

6. Thomson (1863, p. 175) elevated his tribe (1859) Coniporina to family level. He described CONIPORIDAE and redescribed the type genus *Coniporus* and the only species *Coniporus orbiculatus* (Gyllenhal). He maintained Jacquelin du Val's ([1861]) family SPHINDIDAE for *Sphindus*, based on *S. dubius* (Gyllenhal).

7. Kiesenwetter (1877, p. 198) proposed a new family ASPIDIPHORIDAE in which he included only *Aspidiphorus*. He cited both the names *Coniporus* and CONIPORIDAE as synonyms.

8. Subsequent to Jacquelin du Val's ([1861]) placement of *Sphindus* and *Aspidiphorus* in the family SPHINDIDAE, some authors have continued to recognize a separate family for *Aspidiphorus*. For this they have consistently used the name ASPIDIPHORIDAE Kiesenwetter, 1877 rather than CONIPORIDAE Thomson, 1859 (see, for example, Houlbert, 1922; Schenkling, 1931; Horion, 1960; Freude, Harde & Lohse, 1967; Merkl, 1986). Recent studies indicate that *Aspidiphorus* and *Sphindus* are very closely related and clearly positioned within the clade that includes other generally accepted confamilial genera (see Sen Gupta & Crowson, 1979; McHugh, 1993). In the literature that considers *Sphindus* and *Aspidiphorus* confamilial, the family-group name SPHINDIDAE is often used. A list of references for works using the name SPHINDIDAE for a family including both *Sphindus* and *Aspidiphorus* and further

references using the name ASPIDIPHORIDAE (with *Sphindus* not included) has been given to the Commission Secretariat. Under Article 40b of the Code the name for the family including both genera is ASPIDIPHORIDAE Kiesenwetter, 1877 (1859), the date 1859 being derived from Thomson's tribal name based on *Coniporus* (see para. 4 above). ASPIDIPHORIDAE thus has priority over SPHINDIDAE Jacquelin du Val, [1861].

9. I have recently consulted a number of authorities (J.F. Lawrence, S.A. Ślipiński, A. Newton, J. Pakaluk and Q. Wheeler) on whether the name ASPIDIPHORIDAE or SPHINDIDAE should be used for the family group that includes both *Sphindus* and *Aspidiphorus*. There was no consensus. Since the group is so poorly known and the body of literature so small it seems appropriate to follow priority and use ASPIDIPHORIDAE as the valid name. ASPIDIPHORIDAE has been used in a major taxonomic work which will be appearing soon (Pakaluk, Ślipiński & Lawrence, in press). As a means of ratifying this and of promoting universality in the usage of the name I propose that ASPIDIPHORIDAE Kiesenwetter, 1877 (1859) be placed on the Official List.

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to rule that *Arpidiphorus* is an incorrect original spelling of *Aspidiphorus* Ziegler in Dejean, 1821;
- (2) to place on the Official List of Generic Names in Zoology the name *Aspidiphorus* Ziegler in Dejean, 1821 (gender: masculine), type species by monotypy *Nitidula orbiculata* Gyllenhal, 1808;
- (3) to place on the Official List of Specific Names in Zoology the name *orbiculata* Gyllenhal, 1808, as published in the binomen *Nitidula orbiculata* (specific name of the type species of *Aspidiphorus* Ziegler in Dejean, 1821);
- (4) to place on the Official List of Family-Group Names in Zoology the name ASPIDIPHORIDAE Kiesenwetter, 1877 (1859) (type genus *Aspidiphorus* Ziegler in Dejean, 1821);
- (5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
  - (a) *Arpidiphorus* Ziegler in Dejean, 1821 (ruled in (1)(a) above to be an incorrect original spelling of *Aspidiphorus* Ziegler in Dejean, 1821);
  - (b) *Aspidophorus* Agassiz, 1846 (an unjustified emendation of *Aspidiphorus* Ziegler in Dejean, 1821 and a junior homonym of *Aspidophorus* Lacépède, [1801]);
  - (c) *Box* Gistel, 1848 (an unnecessary replacement name for *Aspidiphorus* Ziegler in Dejean, 1821);
  - (d) *Coniporus* Thomson, 1859 (a junior objective synonym of *Aspidiphorus* Ziegler in Dejean, 1821).

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